



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/684,942 | 10/14/2003 | Jeff A. Krolik | 1001.1503102 | 3699 |

28075 7590 04/18/2007
CROMPTON, SEAGER & TUFTE, LLC
1221 NICOLLET AVENUE
SUITE 800
MINNEAPOLIS, MN 55403-2420

| |
|----------|
| EXAMINER |
|----------|

HOUSTON, ELIZABETH

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

3731

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS | 04/18/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/684,942

Applicant(s)

KROLIK ET AL.

Examiner

Elizabeth Houston

Art Unit

3731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 31-37,39 and 41-57 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 31-37,39 and 41-57 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 31, 32, 35-37, 39, 43, 44, 47, 48, 51, 52 and 55 are rejected under 35 U.S.C. 102(b) as being anticipated by Grayhack et al. (USPN 4,611,594).**

3. Grayhack discloses an apparatus capable of being used with an interventional device in retrieving a vascular filter (see entire document). The retrieval adapter (12) has a proximal end, distal end and a lumen. The distal end includes a curved portion (Fig. 8, 19) and a plurality of expandable slits (not labeled but shown in Fig. 8) extending proximally from the distal end. The slits divide the distal portion of the retrieval adaptor into a plurality of curved portions (as seen in Fig. 7 and curved portion (19) as seen in Fig. 8). The adaptor is configured to radially expand and receive at least a portion of the filter within the lumen. The proximal end of the adapter is tapered to facilitate engagement with an interventional device. The adapter is made of biocompatible material (Col 3, lines 37-40). The retrieval device is capable of being indirectly coupled to a distal end of an interventional device.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 31, 32, 35-37 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daniel et al. (USPN 6,171,327) in view of Bagaoisan et al. (USPN 6,152,909).**

6. Daniel discloses an apparatus capable of being used with an interventional device in retrieving a vascular filter (see entire document). The retrieval adapter (18) has a proximal end, distal end and a lumen. The distal end includes a curved portion (Figs. 12 and 13) and one or more expandable slits (144, Fig. 10) configured to radially expand and receive at least a portion of the filter within the lumen. The proximal end of the adapter is tapered to facilitate engagement with an interventional device (Figs. 9-15). The adapter is made of biocompatible material. The retrieval device is capable of being indirectly coupled to a distal end of an interventional device.

7. Daniel does not disclose that the retrieval adaptor includes an opening oblique to the longitudinal axis.

8. Bagaosian discloses a catheter with a distal tip that can be perpendicular to the longitudinal axis or oblique to the longitudinal axis (see figs. 8a, 8b and 8c). Bagaosian

Art Unit: 3731

teaches that the angled tip maximizes the opening for ease of retrieval (Col 12, lines 1-10).

9. It would have been obvious to one having ordinary skill in the art at the time of the invention to incorporate the angled tip as disclosed by Bagaosian to enhance the retrieval catheter of Daniel. The angled tip provides a wider opening for more easily receiving the filter device.

10. Claims 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daniel in view of Bagaosian et al. as applied to claim 31 above and further in view of Ferrera (USPN 6,240,231).

11. Claims 33, 34, 45, 46, 53 and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grayhack in view of Ferrera (USPN 6,240,231).

12. Daniel in view of Bagaosian and Grayhack disclose the invention substantially as claimed as stated above except for the radiopaque coil.

13. Ferrera discloses using a radiopaque marker in the form of a coil.

14. It would have been obvious to one having ordinary skill in the art at the time of the invention to incorporate a radiopaque marker into the filter retrieval device since it is a well-known advantage for enhancing visibility of the device during surgery. It would have been obvious to one having ordinary skill in the art at the time of the invention to incorporate the radiopaque marker in the form of a coil since it is a well-known enhancement for maintaining a low profile as well as maintaining flexibility.

Art Unit: 3731

15. Claims 41 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daniel in view of Bagaosian et al. as applied to claim 31 above and further in view of Green (USPN 6,485,501).

16. Claims 41, 42, 49, 50, 56 and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grayhack in view of Green (USPN 6,485,501).

17. Daniel in view of Bagaosian and Grayhack disclose the invention substantially as claimed as stated above except for the interventional device being a stent delivery device or angioplasty catheter.

18. Green discloses a retrievable vascular filter system in combination with an interventional device such as an angioplasty catheter or a stent delivery system. The system is useful in preventing the risk of stroke, which can occur when emboli become lodged in the vasculature. The retrieval device is capable of being indirectly coupled to the distal end of an interventional device.

19. It would have been obvious to one having ordinary skill in the art at the time of the invention to incorporate an interventional device to enhance the use of the filter by allowing the physician to be able to deliver the components as one apparatus rather than having to make multiple deliveries. The inventions are analogous with each other and the instant invention and therefore the combination is proper.

Terminal Disclaimer

20. Although applicant has stated in the remarks that a terminal disclaimer has been submitted to obviate the double patenting rejection, no documents regarding a terminal disclaimer have been received.

Double Patenting

21. Claims 31-34, 36-38, 42-45, 48 and 50-54 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-9, 11-19, and 21-25 of U.S. Patent No. 6,663,651 in view of Daniel (USPN 6,171,327). The patent discloses all the features of the pending application including a retrieval adaptor with one or more expandable slits, radiopaque coil, and an interventional device. The patent does not disclose that the retrieval adaptor is radially expandable and has a curved portion. Daniel discloses that the retrieval adaptor is expandable and has a curved portion. It would have been obvious to one having ordinary skill in the art at the time of the invention to make the retrieval adaptor radially expandable since it is an enhancement that would allow the adaptor to have a low profile when it is not engaging the filter.

Response to Arguments

22. Applicant's arguments with respect to claim3 31-37, 39 and 41-57 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

23. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth Houston whose telephone number is 571-272-7134. The examiner can normally be reached on M-F 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anhtuan Nguyen can be reached on 571-272-4963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3731

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

eh


ANH TUAN T. NGUYEN
SUPERVISORY PATENT EXAMINER
4/15/07